GSM Internal Antenna

Part Number: VTGSMIA-1

1 Dimension (Unit: mm)

2 Electrical Characteristics

2.1 GSM Antenna

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Specifications</th>
<th>Post Environmental Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency (MHz)</td>
<td>824 ~ 960MHz/1710 ~ 1990 MHz</td>
<td>±3 MHz</td>
</tr>
<tr>
<td>2</td>
<td>V.S.W.R (in BW)</td>
<td>≤2.0 : 1</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td>Gain (Zenith)</td>
<td>1 dB</td>
<td>±0.5 dB</td>
</tr>
<tr>
<td>4</td>
<td>Impedance</td>
<td>50 Ω</td>
<td>—</td>
</tr>
</tbody>
</table>

2.2 Mechanical

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cable</td>
<td>RF1.13 or others</td>
</tr>
<tr>
<td>2</td>
<td>Connector</td>
<td>IPEX or others</td>
</tr>
</tbody>
</table>
3 Reliability
Condition:  
Temperature: 40±5℃
Load: DC=5V±0.5 V
Quantity: 2000pcs
Sustained Time: 480h

4 Environmental Specifications
Condition:
- Post Environmental Tolerance (Refer to the form 1)
- Temperature range 25±3℃
- Relative Humidity range 55~75%RH
- Operating Temperature range -40℃~+85℃
- Storage Temperature range -40℃~+100℃

5.1 Moisture Proof
The device should satisfy the electrical characteristics specified in form 1 after exposed to the temperature 40±2℃ and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

5.2 Vibration Resist
The device should satisfy the electrical characteristics specified in form 1 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X, Y and Z directions.

5.3 Drop Shock
The device should satisfy the electrical characteristics specified in form 1 after dropping onto the hard wooden board from the height of 30cm for 3 times each facet of the 3 dimensions of the device.

5.4 High Temperature Endurance
The device should satisfy the electrical characteristics specified in form 1 after exposed to temperature 80±5℃ for 24±2 hours and 1~2 hours recovery time under normal temperature.

5.5 Low Temperature Endurance
The device should also satisfy the electrical characteristics specified in form 1 after exposed to the temperature -40℃±5℃ for 24±2 hours and to 2 hours recovery time under normal temperature.

5.6 Temperature Cycle Test
The device should also satisfy the electrical characteristics specified in form 1 after exposed to the low temperature -25℃ and high temperature +85℃ for 30±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.